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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

REILLY, SEAN M

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/928,128	Applicant(s) CARLSON ET AL.	
	Examiner Sean Reilly	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to Applicant's amendment and request for reconsideration filed on June 30, 2006. Claims 1-60 are presented for further examination. All independent claims have been amended.

Response to Arguments

1. In response to Applicant's request for reconsideration filed on June 30, 2006, the following factual arguments are noted:

- a. The combination of Wolf and Chang is invalid.

In considering (a), Examiner respectfully disagrees with Applicant's argument. Applicant asserts that the use of API method calls in Wolf's system "would be a substantially different method of operation." Examiner disagrees with this analysis. Examiner agrees that Wolf did not specifically recite *calling selected methods in an API* of a resource to place that resource in a predetermined configuration. Nonetheless Applicant has failed to see the full value in Wolf's teaching. In particular Wolf disclosed the concept of *automating the configurations of thousands of network devices* across multi-vendor networks. One interface that Wolf uses to perform this configuration is through the uploading of configuration files to the network devices. Wolf does not restrict his system to merely this one interface as Applicant presumes. Instead Wolf leaves his system open ended so that users (most likely system administrators) can expand it to configure the types of devices specific to their own networks. Furthermore as evidenced by at least Chang the configuration of network devices through API method calls was widely in use

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prior to Applicant's invention. It certainly would have been within the skill set of one of ordinary skill in the art at the time of Applicant's invention to extend Wolf's teachings to configure other types of network devices that utilize different configuration interfaces, such as an API method call.

Examiner has and continues to maintain that the inclusion of an API method call configuration interface is certainly an obvious modification to Wolf's system. Applicant is encouraged to file an appeal brief so that his issued can be pushed to the Board of Patent Appeals and Interferences for resolution.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 5-10, 18-22, 25-30, 38-42, 45-50, and 58-60 are rejected under 35

U.S.C. 103(a) as being unpatentable over Wolf et al. (U.S. Patent Publication No.

2002/0178380, hereinafter "Wolf") and Chang et al. (U.S. Patent Number 6,604,136;

hereinafter Chang) and Applicant's admitted prior art.

In considering claim 1, Wolf discloses a method for managing multiple resources in a system, comprising;

receiving a user request to generate a configuration policy (§89-§96, “the policy engine 60 determines which policies to use to generate the configuration, based upon the target level selected by the user”);

In response to the user request, locating the multiple resources in the system (§91, Fig. 8, “configurations are to be generated only for those configuration elements, e.g., devices, cards, interfaces, lines or POPs, specified by the instance rule”), wherein for each resource at least one element (“attribute”) is provide that can place that resource in a predetermined configuration (§ 24, loading a policy into a device and §115-§124, “configlet properties represent the supported attributes that you can specify for a protocol or service in a configuration”);

receiving user selection of a set of the multiple resources (§91, Fig. 8, “configurations are to be generated only for those configuration elements, e.g., devices, cards, interfaces, lines or POPs, specified by the instance rule”);

for each resource in the selected set, querying all elements to locate elements for that resource and display resource configuration produced by the located elements (§ 97 or § 147)

receiving user selection of a resource configuration corresponding to one element for each selected resource in the set (§115-§117, Fig. 13); and

from the user selection of resource configuration, creating a configuration policy that calls an element for each resource in the selected set in order to place that resource in a predetermined configuration (uploading the policy, same cited sections as above).

Wolf disclosed the invention substantially as claimed however, Wolf failed to specifically recite *calling selected methods in an API* of a resource to place that resource in a predetermined

configuration. Wolf's system takes a generic network policy supplied by for instance by a system administrator, identifies the various configurations changes required for each specific network device in the network, and applies the necessary configuration changes to the respective devices in order to implement the supplied network policy. Further Wolf's system was specifically designed to support multiple vendors, devices, and versions (§ 33) such that large and complex networks that use varying network devices could be configured to implement a network wide policy. One of the main goals of Wolf's system is to support varying vendor products and utilize each vendor specific method for propagating configuration information (see inter alia ¶s 11, 12, 113, 142, and 143), such as the use of API method calls. It was widely known at the time of the invention to configure network devices utilizing API method calls, as evidenced by at least Chang. In an analogous art Chang disclosed a network management system where network processors (resources) are placed into a predetermined configuration (configured) using API method calls (see inter alia Col 3, lines 1-32). Chang further disclosed that the use of API method calls allows resources to be managed efficiently (Chang Col 2, lines 65-67). Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the API method call functionality, as disclosed by Chang, within the system of Wolf, since Wolf specifically envisioned supporting all network vendor methods for propagating network configuration information and additionally since API method calls are an efficient way to manage network resources (Chang Col 2, lines 65-67).

Wolf also failed to specifically disclose that the multiple resources include storage devices, switches, host adaptors, volume managers, backup program and copy programs. Although Wolf does not disclose all of these specific network devices and elements, there is no

reason why Wolf's system cannot be expanded to include any or all desired network devices and elements. Wolf contemplates this in ¶33, which states, "[t]he present invention is built on a highly scalable architecture that can accommodate the continued explosive growth of the Internet. It scales to support networks with thousands of devices, automated operations and large number of users. It automates routine operations and supports multiple vendors, devices and image versions." Thus, it would have been obvious to include any known network devices or elements in the configuration system taught by Wolf, so that all sorts of devices, vendors, and ISPs can benefit from Wolf's automated configuration system in the expanding Internet. Furthermore storage devices, switches, host adaptors, volume managers, backup program and copy programs were widely known in the art at the time of Applicant's invention and are commonly configured by network management systems, as admitted by Applicant on pages one and two of Applicant's specification. Therefore, it would have been obvious to include those known elements in the Wolf system.

In considering claim 2, Wolf further discloses displaying a first user interface enabling the user to select the set of the multiple resources to include in the configuration policy (Fig. 8); and displaying a second user interface enabling the user to select the one element for each resource in the set (Fig. 13).

In considering claim 5, Wolf further discloses that each of multiple elements provided for one resource define a different configuration of the resource (Fig. 13, window 212, "accesscontrol," "commonipsettings," "connectivity,").

In considering claim 6, Wolf further discloses that determining the at least one element for each resource comprises: using interfaces in a lookup service proxy object to query element proxy objects to determine a name for each of the element proxy objects (§ 115, Fig. 8, Fig. 13, wherein a user uses the interface in fig. 8, and clicks on the “List policies” button to access a lookup service that finds and displays the names of the properties listed in window 212).

In considering claim 7, Wolf further discloses displaying at least one selectable list of the names of each of the element proxy objects for each resource, wherein the user selects one element for each resource from the selectable lists (Fig. 13, list 212).

In considering claim 8, Wolf discloses a method for configuring multiple resources in the system, comprising:

receiving user selection of one of multiple configuration policies, wherein each configuration policy defines resources to configure and one element for each resource to configure, wherein each element specifies configuration parameters to use to configure the resource; receiving user selection of an instance of one resource to configure, wherein the user selected resource instance is capable of being configured by the configuration policy; determining additional resource instances that are configured by the selected configuration policy; and calling the elements defined for the selected

configuration policy to configure the user selected resource instance and the determined additional resource instances according to the element configuration parameters (§ 89-96; § 115-124; Fig. 8, Fig. 13, as described above).

In considering claim 9, Wolf further discloses displaying a first interface listing the multiple configuration policies, wherein the user selects one configuration policy from the list (Fig. 8); and displaying at a second interface enabling the user to select the instance of the resource to configure (Fig. 13).

In considering claim 10, Wolf further discloses querying information indicating the resource instances available for the configuration, wherein the information indicates the connectedness of the resource instances, wherein the determined additional resource instances are connected (Fig. 13, “connectivity”).

In considering claim 18, Wolf further discloses that each of multiple elements provided for one resource define a different configuration of the resource (Fig. 13, window 212, “accesscontrol,” “commonipsettings,” “connectivity,”).

In considering claim 19, Wolf further discloses querying configuration policy proxy objects in a lookup service to determine configuration policies; displaying a user interface listing the determined configuration policies, wherein the user selects one of the configuration policies from the list (Fig. 8);

downloading the configuration policy proxy object for the selected configuration policy from the lookup service; and using an interface in the downloaded configuration policy proxy object to call the elements for each resource to configure the user selected and additional resource instances according to the element configuration (Fig. 13).

In considering claim 20, Wolf further discloses that determining the additional instances of the resource further comprises: querying attributes associated with a proxy object in a lookup service for the user selected configuration policy to determine resource instances capable of being configured by the selected configuration policy (Fig. 8, wherein the querying occurs in order to display the devices shown and selected in the figure).

Claims 21, 22, 25-30, and 38-40 are parallel system claims to claims 1, 2, 5-10, and 18-20, and are thus rejected for the same reasons.

Claims 41, 42, 45-50, and 58-60 are parallel article of manufacture claims to claims 1, 2, 5-10, and 18-20, and are thus rejected for the same reasons.

2. Claims 3, 4, 11-17, 23, 24, 31-37, 43, 44, and 51-57 rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf and Chang and Applicant's admitted prior art, in view of DeKoning (U.S. Patent No. 6,671,776).

In considering claims 3, 4, and 11-17 and their parallel system and article of manufacture claims (23, 24, 31-37 and 43, 44, 51-57), these claims all describe specific devices and system configurations that are configured by the configuration policies (for instance, a host adaptor, a switch, and storage devices). Although Wolf does not disclose all of these specific network devices and elements, there is no reason why Wolf's system cannot be expanded to include any or all desired network devices and elements. Wolf contemplates this in ¶33, which states, "[t]he present invention is built on a highly scalable architecture that can accommodate the continued explosive growth of the Internet. It scales to support networks with thousands of devices, automated operations and large number of users. It automates routine operations and supports multiple vendors, devices and image versions."

Thus, it would have been obvious to include any known network devices or elements in the configuration system taught by Wolf, so that all sorts of devices, vendors, and ISPs can benefit from Wolf's automated configuration system in the expanding Internet. As described below, and as further evidenced by DeKoning, all of the elements claimed in claims 3, 4, and 11-17 are known elements in the Internet, and are commonly configured by network management systems. Therefore, it would have been obvious to include those known elements in the Wolf system.

In considering claims 3 and 4, Wolf discloses that the resources include a switch ("switch") and a host adaptor ("interfaces," "web hosting servers") and configuring/allocating paths between the devices (Fig. 13, "connectivity"). DeKoning further discloses a network configuration system that allows a manager to set configurations related to storage devices on a storage area network, including host adaptors, storage devices, volume managers, and

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configuring logical volume and allocated storage space (see Figs. 1, 8; col. 8, line 30 – col. 9, line 14).

Claims 13-14 describe the same devices and configurations as claim 3.

In considering claim 15, claim 15 additionally describes querying information regarding devices that can be configured according to topology of the host adaptor and storage device instances. DeKoning further discloses monitoring and configuring the system according to its topology (col. 8, lines 40-60, “the administrator selects the topology submenu then a screen is displayed from which the administrator can configure the topology of the network”).

Claims 16-17 describe the same devices and configurations as claim 3.

Thus, claims 3, 4, 11-17, 23, 24, 31-37, 43, 44, and 51-57 are rejected as being obvious over the combined teachings of Wolf and DeKoning.

Conclusion

The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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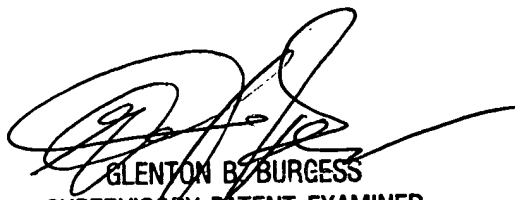
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 18, 2006


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